In the Claims:

1. (Original) An interactive video origination system employing a layered architecture, such system enhancing video content through associated computer data, one of said layers including a watermark encoder for in-band watermarking of the video content with said associated computer data.

2. (Original) An ATVEF-compliant system according to claim 1.

3. (Original) An interactive video consumer system employing a layered architecture, such system providing enhanced consumer experience through computer data associated with video content, one of said layers including a watermark decoder for decoding said computer data from in-band video content.

4. (Original) An ATVEF-compliant system according to claim 3.

5. (New) An interactive video origination system employing a layered architecture comprising at least four layers, a lowest layer of the architecture being customized to particular hardware being used, and higher layers being progressively more independent of the hardware so as to offer hardware-independent interfaces for interacting with the system, the architecture including at least a physical layer, a network layer, and an application layer, such system enhancing video content through associated computer data, wherein a watermark encoder for in-band watermarking of the video content with said associated computer data is included in said physical layer.

6. (New) An interactive video consumer system employing a layered architecture comprising at least three layers, a lowest layer of the architecture being customized to particular hardware being used, and higher layers being progressively more independent of the hardware so as to offer hardware-independent interfaces for

interacting with the system, the architecture including at least a physical layer and an application layer, such system providing enhanced consumer experience through computer data associated with video content, wherein a watermark decoder for decoding computer data from in-band video content is included in said physical layer, or in an intervening higher layer, but not so high as to be included in said application layer.

7. (New) The system of claim 6 wherein said watermark decoder is provided in said physical layer.

8. (New) The system of claim 6 wherein said watermark decoder is provided in a link layer.

9. (New) The system of claim 6 in which the interactive video consumer system also includes a decoder for obtaining computer data transmitted with the video by multicast IP transmission.

10. (New) The system of claim 6 wherein said watermark decoder is provided in a consumer set-top box.

11. (New) A video system employing a layered architecture comprising at least four layers, a lowest layer of the architecture being customized to particular hardware being used, and higher layers being progressively more independent of the hardware so as to offer hardware-independent interfaces for interacting with the system, the architecture including at least a physical layer, a link layer, a network layer, and an application layer, wherein a watermark processor is included in said physical layer, so that said application layer can make use of watermark functionality without regard to the particular physical implementation of said watermark processor.